

Notice of Allowability

Application No.

10/756,913

Examiner

Stephen J Stein

Applicant(s)

WANG ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicants' Election filed September 27, 2004.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☒ The drawings filed on 13 January 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 2/12/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

STEPHEN STEIN
PRIMARY EXAMINER

Stephen Stein

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

IN THE SPECIFICATION

On page 1, line 2, after "Cross Reference to Related Application", substitute the following paragraph

-- This application is a continuation-in-part of and claims priority to copending U.S. utility application entitled, "Semiconducting Oxide Nanostructures," having ser. no. 10/211,696, filed on 8/2/02, which is a divisional application of U.S. Patent 6,586,095 entitled "Semiconducting Oxide Nanostructures" having serial no. 10/042,868, now U.S. 6,586,095, filed on 01/08/02, which claimed priority to copending U.S. provisional application entitled, "Semiconductive Oxide Nanobelts" having ser. no. 60/261,367, filed January 12, 2001, which is entirely incorporated herein by reference. --

IN THE CLAIMS

Cancel Non-elected claims 18-21

Election/Restrictions

2. Applicant's election without traverse of Group I, claims 1-17 in the reply filed on September 27, 2004 is acknowledged.

3. This application is in condition for allowance except for the presence of claim 18-21 elected without traverse. Accordingly, claims 18-21 have been cancelled.

Allowable Subject Matter

4. Claims 1-17 are allowed.

Reasons for Allowance

5. The following is an examiner's statement of reasons for allowance:

While the closest prior art of record, such as Pan, Dai and Wang, *Nanobelts of Semiconducting Oxides*, Science Magazine, Vol. 291, March 9, 2001, and Wang, *Semiconducting Oxides Prepared in the Form of Nanobelts*, MRS Bulletin, August, 2001 teach nanostructures of nanobelts (ribbon-like) of semiconductor oxides of zinc, tin, indium, cadmium and gallium having a rectangle like cross-section with widths of 30-300 nm, the prior art fails to teach or suggest that the nanostructure is helical in shape or in the shape of a ring (nanoring) as claimed in independent claims 1 and 10. In the prior art, the nano-belts of semiconductor oxides are merely nanometer scale and ribbon shaped (nanobelts) with no specific orientation of the nanobelt. The prior art taken as whole, fails to teach or suggest the claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Stein whose telephone number is 572-272-1544. The

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examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m. If the attempts to reach the examiner are unsuccessful, the examiner's supervisor, Deborah Jones can be reached by dialing 571-272-1535. The official fax number is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 24, 2004



Stephen J. Stein
Primary Examiner
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